

WHAT IS CLAIMED IS:

1. A recording element comprising a support having thereon an image-receiving layer, said recording element containing core-shell particles wherein said core comprises an inorganic or organic particle and said shell comprises an organosilane or a hydrolyzed organosilane derived from a compound having the formula:



wherein

R is hydrogen, or a substituted or unsubstituted alkyl group having from 1 to about 20 carbon atoms or a substituted or unsubstituted aryl group having from about 6 to about 20 carbon atoms;

Z is an alkyl group having from 1 to about 20 carbon atoms or aryl group having from about 6 to about 20 carbon atoms, with at least one of Z having at least one primary, secondary, tertiary or quaternary nitrogen atom;

a is an integer from 1 to 3; and

b is an integer from 1 to 3;

with the proviso that $a + b = 4$; and

with the further proviso that the amount of organosilane shell material is such that Ratio R, which is the number of micromoles of organosilane used to shell the core particles to the total core particles' surface area (in m^2), is greater than 10.

2. The element of claim 1 wherein said image-receiving layer comprises an inkjet receiving layer.

3. The element of claim 1 in which Ratio R, which is the number of micromoles of organosilane used to shell the core particles to the total core particles' surface area (in m^2), is greater than 25.

4. The element of claim 1 wherein said core comprises an inorganic or organic particle having a median particle size diameter greater than 40 nm.

5. The element of claim 1 wherein said core comprises an inorganic or organic particle having a median particle size diameter between 50 and 300 nm.

6. The element of claim 1 wherein said core comprises an inorganic or organic particle having a specific surface area between 10 and 200 m²/g.

7. The element of claim 1 wherein said shell material has at least one substituent comprising a primary, secondary or tertiary amine or amide or ureido group.

8. The element of claim 1 wherein the surfaces of said core-shell particles are positively charge.

9. The recording element of claim 1 wherein said core-shell particles are present in said image-receiving layer.

10. The recording element of claim 1 wherein said core-shell particles are present in an overcoat layer.

11. The recording element of claim 1 wherein Z is an alkyl group having from 1 to about 6 carbon atoms containing one or two primary or secondary amine moieties.

12. The recording element of claim 1 wherein said core comprises silica.

13. The recording element of claim 1 which also includes a base layer located between said image-receiving layer and said support.

14. The recording element of claim 1 wherein said image-receiving layer contains a mordant.

15. The recording element of claim 1 further comprising a binder.

16. The recording element of claim 15 wherein said binder comprises polyvinyl alcohol.